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10/647,759	08/25/2003	Lakshminath Dondeti	120-162	2732
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McGUINNESS & MANARAS LLP			EXAMINER	
125 NAGOG PARK			WYSZYNSKI, AUBREY H	
ACTON, MA 01720				
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			10/17/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/647,759

Applicant(s)

DONDETI ET AL.

Examiner

Aubrey H. Wyszynski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/02/07 has been entered.
2. Claims 1-15 are pending.

### ***Response to Arguments***

3. Applicant's arguments filed 7/2/07 have been fully considered but they are not persuasive.

Applicant argues Mualem fails to suggest "in response to detection of corruption of the security association in volatile storage, where the corruption is caused by an event other than power failure, employing the copy of the security association in non-volatile storage to update the security association in volatile storage." However, the examiner is only relying on the Mualem reference to teach the following limitation: "in response to detection of corruption of the security association in volatile storage, where the corruption is caused by an event other than power failure." The examiner continues to explain that Jari further discloses "employing the copy of the security association in non-volatile storage to update the security association in volatile storage" (abstract,

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controller 6 retrieves the latest security association database from the memory 7 and injects it into the volatile memory 5). However, the Mualem reference teaches "in response to detection of corruption of the security association in volatile storage, where the corruption is caused by an event other than power failure" in [0010]. Mualem explains, "corruption could occur if, for example, the network adapter or the local bus is "under stress" while the SA is being transferred." Additionally, in [0028], Mualem teaches a data storage system including volatile and non-volatile memory and or/storage elements. However, the system of Jari also discloses maintaining a security association in volatile storage (fig. 1, #5 & abstract, volatile memory storing a security association database). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Jari with the method of Mualem to detect corruption in the security association in non-volatile memory where the corruption is caused by an event other than power failure (such as when the SA is being transferred) in order to identify integrity errors in the security association, as taught by Mualem (fig. 2, #110-112). The applicant argues Mualem fails to teach storing a copy of the SA in both volatile and non-volatile memory and Mualem fails to teach storage of a backup SA in any type of memory. Again, the examiner is not relying on the Mualem reference to teach those limitations. The examiner has relied upon the Jari reference to teach those limitations.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jari, et al., U.S. Patent Application Publication No. 2001/0020275 and in view of Mualem et al, U.S. Patent Application Pub. No. 2002/0166070.

Regarding claim 1, Jari discloses the method for preserving security associations between at least two entities comprising the steps of: maintaining a security association relating to communication between the at least two entities in in volatile storage (fig. 1, #5 & abstract, volatile memory storing a security association database); storing a copy of the security association in non-volatile storage (fig. 1, #7 & abstract, controller 6 periodically stores the security association database in a disk memory 7). Jari lacks or does not expressly disclose in response to detection of corruption of the security association in volatile storage, where the corruption is caused by an event other than power failure. However, Mualem discloses in response to detection of corruption of the security association in volatile storage where the corruption is caused by an event other than power failure ([0010] and fig. 2 #110). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Jari with the method of Mualem to detect corruption in the security association where the

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corruption is caused by an event other than power failure in order to identify integrity errors in the security association, as taught by Mualem (fig 2. #110-112). Jari further discloses employing the copy of the security association in non-volatile storage to update the security association in volatile storage (abstract, controller 6 retrieves the latest security association database from the memory 7 and injects it into the volatile memory 5).

Regarding claim 2, Jari further discloses encrypting the security association prior to storing the security association in the nonvolatile storage (¶[0010]).

Regarding claim 3, Jari further discloses storing includes the step of detecting a trigger event (fig. 2, #11).

Regarding claim 4, Jari further discloses detecting a trigger event includes the step of detecting a change in the security association (fig. 2, #11).

Regarding claim 5, Jari further discloses updating the contents of a security associations table using the security association stored in non-volatile storage (fig. 3, #25).

Regarding claim 10, Jari discloses an apparatus for preserving security associations between at least two entities comprises:

a volatile memory including a first table for storing a security association related to communication between the at least two entities (fig. 1, #5 & abstract, volatile memory storing a security association database);

a non-volatile memory including a second table for storing at least a portion of the first table (fig. 1, #7 & abstract, controller 6 periodically stores the security association database in a disk memory 7);

means for copying the at least a portion of the first table to the second table (abstract, controller 6 retrieves the latest security association database from the memory 7 and injects it into the volatile memory 5). Jari lacks or does not expressly disclose in response to detection of corruption of the security association in volatile storage, where the corruption is caused by an event other than power failure. However, Mualem discloses in response to detection of corruption of the security association in volatile storage where the corruption is caused by an event other than power failure (¶[0010] and fig. 2 #110). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Jari with the method of Mualem to detect corruption in the security association where the corruption is caused by an event other than power failure in order to identify integrity errors in the security association, as taught by Mualem (fig. 2, #110-112).

Regarding claim 11, Jari further discloses encrypting the at least a portion of the first table prior to copying the at least a portion of the first table to the second table (¶[0010] & fig. 2, #14-15).

Regarding claim 12, Jari further discloses copying overwriting the at least a portion of the first table with contents of the second table (fig. 3, #25).

Regarding claim 13, Jari further discloses encryption logic for encrypting the at least a portion of the first table (fig. 2, #14).

Regarding claim 14, Jari further discloses decryption logic for decrypting the second table (fig. 3, #23).

Regarding claim 15, Jari further discloses a key, stored in non-volatile memory, for encrypting the at least a portion of the first table ([0036]).

6. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung, U.S. Patent No. 6,760,444 and in view of Jari, et al., U.S. Patent Application Publication No. 2001/0020275 and further in view of Mualem et al, U.S. Patent Application Pub. No. 2002/0166070.

Regarding claim 6, Leung discloses a method for maintaining security associations between a server and a member, the method comprising the steps of:  
generating a security association permitting communication between the server and the member (col. 5, lines 5-8); storing the security association in a location of volatile



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memory available to the server (col. 6, lines (49-52). Leung lacks or does not expressly disclose storing the security association in volatile memory and storing a copy of the security association in non-volatile memory. However, Jari discloses storing a copy of the security volatile storage (fig. 1, #5 & abstract, volatile memory storing a security association database); storing a copy of the security association in non-volatile storage (fig. 1, #7 & abstract, controller 6 periodically stores the security association database in a disk memory 7). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Leung with the device of Jari, to storing the security association in non-volatile storage in order restore the security association in case of a power failure to as taught by Jari (abstract).

Jari lacks or does not expressly disclose in response to detection of corruption of the security association in volatile storage, where the corruption is caused by an event other than power failure. However, Mualem discloses in response to detection of corruption of the security association in volatile storage where the corruption is caused by an event other than power failure (¶[0010] and fig. 2 #110). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Jari with the method of Mualem to detect corruption in the security association where the corruption is caused by an event other than power failure in order to identify integrity errors in the security association, as taught by Mualem (fig 2. #110-112). Jari further discloses employing the copy of the security association in non-volatile storage to update the security association in volatile storage (abstract, controller 6 retrieves the

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latest security association database from the memory 7 and injects it into the volatile memory 5).

Regarding claim 7, Jari further discloses encrypting the security association prior to storing the security association in the nonvolatile storage (¶[0010]).

Regarding claim 8, Jari further discloses storing includes the step of detecting a trigger event (fig. 2, #11).

Regarding claim 9, Jari further discloses detecting the trigger event includes the step of detecting a new security association between the server and the member (¶[0002], lines 21-26).

### ***Conclusion***


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aubrey H. Wyszynski whose telephone number is (571)272-8155. The examiner can normally be reached on Monday - Thursday, and alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 5712723811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AHW

  
KAMBIZ ZAND  
SUPERVISORY PATENT EXAMINER